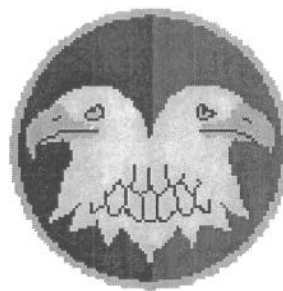


**PROJECT REPORT**

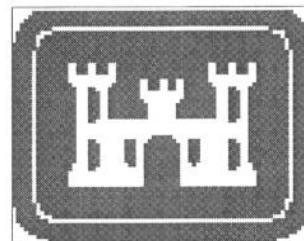
**RANGE CLEANUP – WI042, 88<sup>th</sup> RSC  
MILWAUKEE (LOGAN)  
U.S. ARMY RESERVE CENTER  
MILWAUKEE, WISCONSIN**

**Contract No. DACA 27-99-D-0021  
Delivery Order No. 0014**



**Submitted to:**

**U.S. Army Corps of Engineers  
Louisville District  
Environmental Engineering Branch**



**Prepared by:**

**IT Corporation  
312 Directors Drive  
Knoxville, Tennessee 37923-4799**

**February 2003**

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## **1.0 Introduction**

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This document presents the report for cleanup activities at the 88<sup>th</sup> RSC facility located at 2372 S. Logan Avenue, Milwaukee, Wisconsin 53207 (Figure 1-1). The cleanup activities were based on the Scope of Work (SOW) provided by the U.S. Army Corps of Engineers (USACE) Louisville District (CELRL) and a site inspection conducted on September 12, 2001.

### **1.1 Property/Project Identifiers**

- Facility ID Number: WI042
- State: Wisconsin
- Facility Name: Milwaukee (Logan) U.S. Army Reserve Center
- City: Milwaukee.

### **1.2 Site Description**

#### **1.2.1 Inspection Information**

Ms. Julie Warner of IT Corporation inspected the range on September 12, 2001. The four-position range with a manual target retrieval system was located on the second floor of the facility. Steel deflector plates extended from the ceiling to the floor. No lead shot was observed, but the bullet trap was filled with sand. The range was relatively clean.

The walls were painted concrete block with coarse acoustical panels as sound deadening material glued to the walls in the firing line area. A pegboard divider wall had been constructed between the range entrance and the firing line. The ceiling was poured concrete panels partially covered with coarse acoustical panels and an acoustical tile dropped ceiling in the firing line area. The floor was also constructed of concrete and did not contain a floor drain.

No other investigations (e.g., lead inspections or asbestos assessments) are known to have been conducted at the range.

## **1.2.2 Pre-Cleanup Characteristics**

### **1.2.2.1 Number of Firing Points**

The range had four firing points.

### **1.2.2.2 Bullet Trap Characteristics**

The bullet trap was a steel deflector system with sand.

### **1.2.2.3 Range Characteristics**

The range, which was located on the second floor, was constructed of the following:

- Floor – concrete, with no drain
- Walls – concrete block with coarse acoustical panels as sound deadening material glued to the walls in the firing line area
- Ceiling – poured concrete panels partially covered with coarse acoustical panels and an acoustical tile dropped ceiling in the firing line area.

Other features included:

- Stored items, including desks, folding chairs, a bulletin board, numerous maps and charts, a trash can, and metal target holders and paper targets
- Four-position, hardened steel bullet trap
- Hand-crank retrieval system
- Fluorescent lights spaced across the ceiling.

### **1.2.2.4 Suspect Asbestos Containing Materials (ACM) Inventory**

No suspect ACM was known to be present.

### **1.2.2.5 Air Handling Systems Description**

The air handling system at the site consisted of the following:

- Air intake louvers located near the ceiling behind the firing line
- Air exhaust fan located in the ceiling behind the bullet trap.

### **1.2.2.6 Access Points**

The only access to the firing range is via an entry door near the firing line.

### **1.3 Scope of Work**

The SOW consisted of the following:

- Cleaning/removing stored items
- Removing sound deadening board and acoustical tile ceiling
- Removing the bullet trap and sand
- Cleaning the range
- Cleaning and removing the air handling system
- Collecting clearance samples
- Scabbling and sealing the floor, if necessary, based on clearance data.

The U.S. Army Reserve Command (USARC) recognized safety and health hazards from lead-dust in indoor rifle ranges; however, regulations supporting cleanup remedies dealt primarily with non-industrial standards. After reviewing information relative to cleaning methods and clearance sampling, the value of 200 micrograms per square foot ( $\mu\text{g}/\text{sf}$ ) was derived as a value that would release the indoor ranges as a room that could be reoccupied as a non-lead work area. This value has also been selected by other federal agencies as acceptable.

## 2.0 Project Team

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The project team involved with the cleanup activities included the following organizations and their representatives:

- Project Initiator – USARC  
Ken Coulter – Facility Support Branch, U.S. Army Reserve Engineer
- Client – 88<sup>th</sup> RSC
- Construction Manager – USACE, Louisville District  
Project Manager – Mark Ringenberg  
Contracting Officer's Representative – David Dierken  
Construction Inspector – Mike Wright
- Contractor – IT Corporation  
Project Manager – Bill Scoville  
Site Supervisor – Charles Heffelfinger and Vincent Morales  
Site Safety Officer/Construction Quality Control Engineer – Charles Pultz and Kelly Baum
- Subcontractors:  
Range Clearance Inspection and Sampling – Legend Technical Services, Mosinee, Wisconsin  
Sand Removal Contractor – World Environmental, Milwaukee, Wisconsin  
Hazardous Debris and Decontamination Water Disposal Facility – Heritage Environmental Services, Indianapolis, Indiana  
Hazardous Sand Disposal Facility – USL City Environmental, Inc., Detroit, Michigan  
Recycled Metal Facility – Start Recycling, LLC, Milwaukee, Wisconsin  
Non-hazardous Debris Disposal Facility – Metro RDF, Franklin, Wisconsin  
Fluorescent Light Tubes – Lighting Resources, Inc., Greenwood, Indiana

### **3.0 Project Activities**

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This section details the project activities performed at the 88<sup>th</sup> RSC facility located at 2372 S. Logan Avenue, Milwaukee, Wisconsin. Project activities consisted of the following:

- Range Removal Activities (Section 3.1)
- Range Cleaning Activities (Section 3.2)
- Range Clearance Inspection and Sampling (Section 3.3)
- Waste Management, Transportation, and Disposal (Section 3.4)
- Site Monitoring (Section 3.5).

The following sections discuss the operational details associated with the implementation of each of these activities.

Range cleanup activities commenced on March 15, 2002, and continued until June 8, 2002. Photographs of cleanup activities are included in Appendix A. Major schedule milestones include:

- Commenced field work on March 15, 2002.
- Completed range cleanup activities on June 8, 2002, and demobilized pending clearance sampling and receipt of clearance sampling results.
- Conducted clearance sampling on June 20, 2002; the results of clearance samples collected on that day indicated that the cleanup performance standards had been attained.

In summary, the following work was performed:

- Double-washed and HEPA-vacuumed the range
- Achieved cleanup of range concrete floor surface to 200 µg/sf
- Removed and disposed of one vacuum box (14 tons) of lead-contaminated sand
- Removed and disposed of three drums (165 gallons) of lead-contaminated decontamination water

- Removed and disposed of three drums (165 gallons) of lead-contaminated debris (insulation)
- Removed and recycled one roll-off box (4,200 pounds) of scrap steel
- Removed and disposed of two roll-off boxes (6.75 tons) of non-hazardous debris
- Removed and recycled one box (40 pounds) of fluorescent light tubes.

### ***3.1 Range Removal Activities***

The following removal activities were completed from March 15 through June 4, 2002:

- Wiped and cleaned stored items and moved them to a location identified by facility personnel.
- Removed and cut-up approximately 4,200 pounds of steel from the bullet trap, ceiling deflectors, and air exhaust fan and placed materials in scrap steel roll-off boxes for recycling. All scrap steel was decontaminated using a lead-clean solution.
- Removed 14 tons of sand from the bullet trap. One sample was collected from the sand and analyzed for lead (see Section 3.4).
- Removed overhead lights, sound deadening material and acoustical tile on ceiling and walls, and other range accessories (e.g., firing line).
- Sealed cracks and edges of floor to prevent water from leaking to first floor.

### ***3.2 Range Cleaning Activities***

On June 5 through June 8, 2002, the firing range was cleaned. To remove as much dust and remaining debris as possible, the firing range was vacuumed using a HEPA vacuum. All surfaces were vacuumed, starting at the end farthest from the main entrance (the bullet trap area) and moving towards the main exit, beginning with the top of the room and working down. All vacuumed materials were containerized and later recycled with the scrap metal.

The walls and ceiling were washed with a commercial detergent and lead barrier paint was applied.

Floor cleaning activities consisted of the application of the following cleaning solutions:

- Detergent

- D-Lead™, manufactured by Esca-Tech
- HMCS-101, manufactured by Chemical Solutions, International.

These solutions were applied in accordance with the manufacturers' recommendations; floor scrubbers were used to increase the effectiveness of the solutions. After the excess solution was removed with wet-dry vacuums, the floor was rinsed with hot water until the water being vacuumed was visibly clear of dirt and suds. All decontamination water was containerized in 55-gallon drums. Copies of the Material Safety Data Sheets for the cleaning solutions are provided in Appendix B.

### ***3.3 Range Clearance Inspection and Sampling***

Upon completion of cleaning activities and prior to clearance sampling, a visual inspection was conducted of the areas potentially affected by the lead hazard control project. The inspection was conducted on June 20, 2002, by Tim Evans, Certified Lead Risk Assessor (License No. LRA 15056) of Legend Technical Services, Inc. The purpose of the inspection was to determine whether the work was completed as required on all interior surfaces treated, as specified in the original project scope and as indicated in the project report, and whether visible settled dust or debris was present.

The visual examination included a surface-by-surface examination to determine if known or suspected lead-dust surfaces were still present in the range. Lead hazard removal verification was documented on a Visual Clearance Form (Appendix C). All interim controls were verified visually to confirm stabilization of all lead dust surfaces, including any friction or impact surfaces treated during the project.

The visual examination verified the absence of visual dust in the former range and on all surfaces treated. The absence of all waste and debris was also verified.

When acceptable visual examination results were received, clearance dust sampling commenced. Clearance dust sampling consisted of collecting single-surface dust wipe samples and analyzing them for lead content to determine whether lead concentrations exceeded clearance criteria (the clearance standard for this project is 200 µg/sf).

A total of 24 dust wipe samples were collected from the following locations:

- Twenty dust wipe samples from:
  - Exhaust fan inlet (001DT)
  - Firing line (002DT)
  - Mid-range (003DT)
  - Mid-range (004DT)
  - Bullet trap (firing line) (005DT)
  - Bullet trap (wall side) (006DT)
  - Ceiling (007DT)
  - Ceiling (008DT)
  - Ceiling (009DT)
  - Wall-left (010DT)
  - Wall-left (011DT)
  - Wall-left (012DT)
  - Wall-right (013DT)
  - Wall-right (014DT)
  - Wall-right (015DT)
  - Front wall-trap (016DT)
  - Front wall-trap (017DT)
  - Front wall-trap (018DT)
  - Back wall (019DT)
  - Back wall (020DT)
  - Back wall (021DT)
  - Outside floor (022DT)
- One field blank sample (023DT)
- One spike sample (024DT).

Figure 3-1 shows the locations where clearance samples were collected. Sampling procedures are discussed in Section 4.1; analytical results are presented on Table 4-1. The clearance inspection and dust wipe sample collection forms and the analytical report are included in Appendices C.

### ***3.4 Waste Management, Transportation, and Disposal***

One composite sample of sand from the bullet trap was collected by Julie Warner of IT Corporation on September 12, 2001, and analyzed for lead by U. S. Environmental Protection Agency (USEPA) Method SW-846 7420. One composite sample of general debris was collected

by Frank Kelly of IT Corporation on March 19, 2002, and also analyzed for lead by USEPA Method SW-846 7420. Both analyses were performed by Custom Analytical Services, Inc. (CAS), in accordance with USEPA Toxicity Characteristic Leaching Procedure (TCLP) Method 1311. As indicated by the analytical results presented in Table 3-1, the sand was Resource Conservation and Recovery Act (RCRA) hazardous. Copies of the analytical reports and laboratory certification are provided in Appendix D.

Hazardous wastes generated during cleanup activities included:

- One vacuum box (14 tons) of lead-contaminated sand was transported by Advanced Waste, Inc., and taken to USL Environmental, Inc., Detroit, Michigan, on April 10, 2002, for stabilization and landfilling.
- Three drums (165 gallons) of lead-contaminated decontamination water were transported by Heritage Transport, LLC, and taken to Heritage Environmental Services, Indianapolis, Indiana, on July 2, 2002, for treatment.
- Three drums (165 gallons) of lead-contaminated debris (insulation from behind the backstop and HEPA filters) were transported by Heritage Transport, LLC, and taken to Heritage Environmental Services, Indianapolis, Indiana, on September 3, 2002, for landfilling.

Table 3-2 summarizes these hazardous waste shipments. Copies of the waste profiles, Land Disposal Restriction (LDR) notifications, and hazardous waste manifests are provided in Appendix E.

Non-hazardous waste generated during project activities and subsequently disposed includes:

- Scrap metal from the bullet trap, ceiling deflectors, and air exhaust system – one roll-off box (4,200 pounds) of scrap metal was transported by Start Recycling, LLC, and taken to its facility in Milwaukee, Wisconsin, on March 2, 2002, for recycling.
- Demolition debris, including acoustical tile and sound deadening material – two roll-off boxes (6.75 tons) of debris were transported by Waste Management, Inc., and disposed of at Metro RDF, Franklin, Wisconsin, on May 29 and June 11, 2002.
- Used fluorescent light tubes – one box (40 pounds) was transported by Heritage Transport, LLC, and taken to Lighting Resources, Inc., Greenwood, Indiana, on July 2, 2002, for recycling.

Table 3-3 summarizes these non-hazardous waste shipments. Copies of the non-hazardous waste shipping documents are provided in Appendix F.

### ***3.5 Site Monitoring***

Personal and area air monitoring for lead was conducted during lead removal operations.

Information on airborne lead sampling and analytical methods is presented in Section 4.2 of this report. A copy of the site monitoring data is provided in Appendix G.

## **4.0 Sample Collection and Analysis**

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### **4.1 Lead Wipe Sampling Summary**

To confirm that the lead contamination had been removed from the floor of the range, on June 20, 2002, personnel from Legend Technical Services, Inc., collected the samples described in Section 3.3, following procedures presented in the project Work Plan.

Horizontal surfaces were sampled to determine total lead content in the settled dust. Lead-in-dust wipe samples were generally secured over a 1-sf area following an “S” pattern from side-to-side, folded in half, and wiped over the same area at a 90° angle to the first “S” pattern (top-to-bottom). Latex gloves were changed between sampling episodes. Samples were then returned to the vials, sealed, and labeled for transport to the laboratory.

A field blank and a spike sample were also prepared and submitted for analysis. The field blank was prepared by removing and replacing the cap of the vial in the sampling area. The spike sample was prepared in the laboratory by treating sampling media with a known quantity of lead dust.

All lead-in-dust wipe samples were acid digested in accordance with USEPA Method SW-846 6010B. Results of the wipe sample analyses are summarized in Table 4-1 and are detailed in the laboratory analytical report provided in Appendix C. Wipe sample locations are shown on Figure 3-1. Copies of the Visual Clearance Form and the Dust Sampling Form are also provided in Appendix C.

The analytical results in Table 4-1 may be summarized as follows:

- After cleaning, the range had lead levels from <2.5 µg/sf (ceiling and wall samples) to 190 µg/sf (mid-range).
- The floor outside the entrance door had a lead level of 36 µg/sf.

Thus, based on these results, the clearance criteria of 200 µg/sf had been attained.

Via a letter dated June 24, 2002, the facility was notified that the clearance levels were attained and that the range could be reoccupied. A copy of the clearance certification letter is provided in Appendix H.

#### ***4.2 Air Monitoring Sampling Summary***

IT Corporation performed airborne lead monitoring. Monitoring was conducted on March 16, 2002, and on May 21 and 22, 2002.

Air monitoring consisted of taking background, personal, excursion, and perimeter samples to comply with Occupational Safety and Health Administration (OSHA) and USEPA rules and regulations during lead clean-up.

All air samples were prepared and analyzed in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7300 using a Thermo Jarrell Ash 61E (ICP) purged spectrometer. A copy of the air monitoring data is provided in Appendix G.

## 5.0 Conclusions

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In total, all the range structures associated with the indoor range at the Milwaukee (Logan) U.S. Army Reserve Center, Milwaukee, Wisconsin, were successfully removed, characterized for disposal, and properly disposed of as indicated below:

- Hazardous, lead-contaminated waste – one vacuum box (14 tons) of sand, three drums (165 gallons) of debris and three drums (165 gallons) of water
- Recycled metal – one roll-off box (4,200 pounds) of scrap metal
- Non-hazardous waste – two roll-off boxes (6.75 tons) of debris
- Fluorescent light tubes –one box (40 pounds) of tubes.

All removal activities were performed as specified in the project SOW and Work Plan, using direct Health and Safety support involving personal and area air monitoring.

Clearance wipe samples document that residual lead levels in the range concrete are below the clearance level of 200  $\mu\text{g}/\text{sf}$ . At the completion of site operations for this activity, all planned objectives were met. Based on a review of the clearance wipe sample data, IT concludes that no further range cleanup is necessary for the Milwaukee (Logan) facility. IT further certifies that the range cleaning activities have successfully attained the project clearance objectives and the range is approved for reoccupancy. Range clearance procedures consisted of the following:

- A surface-by-surface visual examination to verify that:
  - The lead hazard control work was completed as required
  - No known or suspected lead dust surfaces are still present in the range at levels that exceed the project clearance level of 200  $\mu\text{g}/\text{sf}$ .
- Clearance sampling consisting of collecting wipe samples from the floor surfaces and analyzing the samples for lead.

Please note that although the range has been cleaned to below the project clearance levels, small amounts of lead dust may be present in the range. The OSHA Construction Industry Standard for Lead (29 CFR 1926.62) should be reviewed before any remodeling activities that may cause a release of dust on wall and floor surfaces are undertaken. The OSHA standard requires certain controls to reduce or maintain worker exposures less than the Permissible Exposure Limit (PEL) of 50  $\mu\text{g}/\text{m}^3$  of lead. The employer must protect the worker from lead.

## **TABLES**

**Table 3-1**  
**Disposal Sample Analytical Results**  
**Milwaukee (Logan) U.S. Army Reserve Center, WI042**  
**Milwaukee, WI**

Sample ID	88MilLogan SS00191201	88MIL LOGAN 032102	TCLP Regulatory Limit
Media	Sand	Debris	
Sample Date	9/12/2001	3/21/2002	
TCLP Metals (mg/L)			
Lead	2290	<0.200	5

**Table 3-2**  
**Hazardous Waste Disposal Log**  
**Milwaukee (Logan) U.S. Army Reserve Center, WI042**  
**Milwaukee, WI**

Waste Type	Code	Shipment Date	Volume/ Weight	Transporter	TSD Facility	Manifest	Doc. #	Disposal Method
Hazardous Sand	D008	4/10/2002	1 Vacuum Box (14 Tons)	Advanced Waste, Inc.	USL City Environmental, Inc. Detroit, MI	MI8243413		Stabilization/Landfill
Decontamination Water	D008	7/2/2002	3 Drums (165 gal)	Heritage Transport, LLC	Heritage Environmental Services, Indianapolis, IN	WIK149663	49663	Treatment
Hazardous Debris	D008	9/3/2002	3 Drums (165 gal)	Heritage Transport, LLC	Heritage Environmental Services, Indianapolis, IN	WIK267389	67389	Landfill

Table 3-3  
Non-Hazardous Waste Disposal Log  
Milwaukee (Logan) U.S. Army Reserve Center, WI042  
Milwaukee, WI

Waste Type	Shipment Date	Volume/Weight	Transporter	TSD Facility	Documentation	Disposal Method
Scrap metal	3/2/2002	1 Roll-off (4,200 lbs)	Start Recycling, LLC Milwaukee, WI	Start Recycling, LLC Milwaukee, WI	Weigh ticket	Recycle
Demolition debris including acoustical tile and sound deadening material	5/29/2002	1 Roll-off (4.75 tons)	Waste Management, Inc. Franklin, WI	Metro RDF Franklin, WI	Weigh ticket 1123174	Landfill
	6/11/2002	1 Roll-off (2.0 tons)			Weigh ticket 1126308	
Fluorescent light tubes	7/2/2002	1 Box (40 pounds)	Heritage Transport, LLC	Lighting Resources, Inc., Greenwood, IN	WIK149662	Recycle

Table 4-1  
Lead Wipe Clearance Sample Results (µg/sf)<sup>1</sup>  
Milwaukee (Logan) U.S. Army Reserve Center, WI042  
Milwaukee, WI

Site/Date Code	88WIMIL02JUN20 <sup>2</sup>		
Sampler	Legend Technical Services, Inc.		
Location	Sample ID	Result <sup>3</sup>	Comment
Exhaust fan inlet	001DT	<b>22</b>	
Firing line	002DT	<b>100</b>	
Mid-range	003DT	<b>62</b>	
Mid-range	004DT	<b>190</b>	
Bullet trap (Firing line)	005DT	<b>48</b>	
Bullet trap (Wall side)	006DT	<b>93</b>	
Ceiling	007DT	<2.50	
Ceiling	008DT	<2.50	
Ceiling	009DT	<2.50	
Wall-left	010DT	<2.50	
Wall-left	011DT	<2.50	
Wall-left	012DT	<2.50	
Wall-right	013DT	<2.50	
Wall-right	014DT	<2.50	
Wall-right	015DT	<2.50	
Front wall-trap	016DT	<2.50	
Front wall-trap	017DT	<2.50	
Front wall-trap	018DT	<b>2.52</b>	
Back wall	019DT	<b>3.56</b>	
Back wall	020DT	<b>2.68</b>	
Back wall	021DT	<2.50	
Outside floor	022DT	<b>36</b>	
Blank	023DT	<2.50	
Spike	024DT	192	186 µg spike

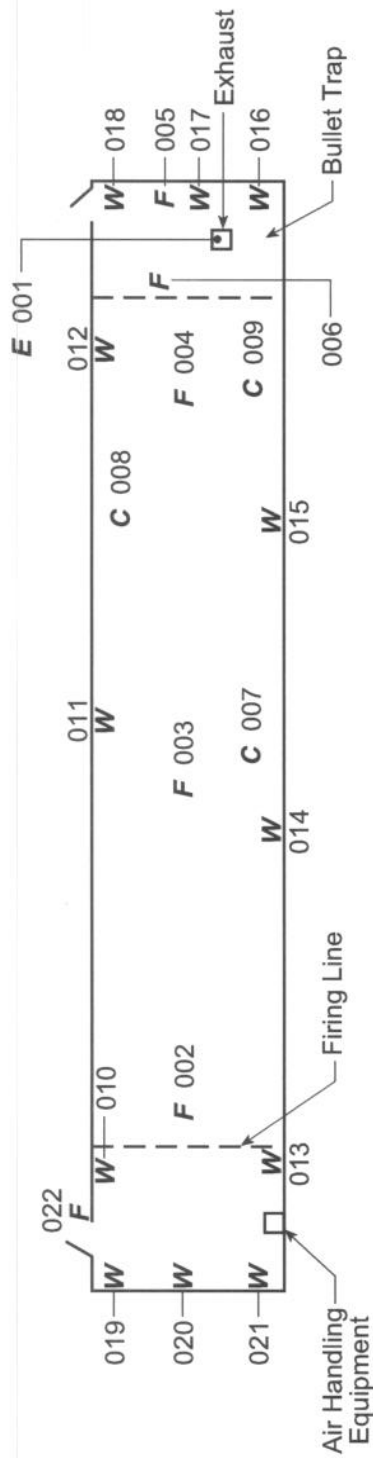
(<sup>1</sup>) = Results expressed in micrograms per square foot (µg/sf) of surface area, except Field Blank and Spike Sample, which are µg/wipe.

(<sup>2</sup>) = Legend Technical Services, Inc., did not use the correct site/date code and sample IDs. This table reflects the correct format.

(<sup>3</sup>) = Results (other than blanks or spikes) in **bold** type are below the clearance level of 200 mg/sf.

## FIGURES





**Legend**  
 F/W/C/E Sample Date  
 20 June 02

Notes: **F** (floor), **W** (wall), **C** (ceiling) and **E** (exhaust) designate the location of the sample. Samples 023 and 024 were a blank and a spike, respectively.

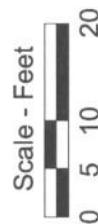


Figure 3-1.  
 Clearance Wipe Sample Locations.  
 Milwaukee, WI (WI042) Reserve Center.

DRAWING BY	KMS	CHECKED BY
	1/13/03	APPROVED BY

DRAWING NO.  
 K-807744-0399-1/03-W

## **APPENDIX H**

### **Clearance Certification Letter**



June 24, 2002

Pete Hoyt  
Facility Manager  
Milwaukee U.S. Army Reserve Center (Logan Avenue)  
2372 S. Logan Avenue  
Milwaukee, Wisconsin 53207

**IT Corporation**

11499 Chester Road  
Cincinnati, OH 45246-4012  
Tel. 513.782.4700  
Fax. 513.782.4807

*A Member of The IT Group*

RE: Range Cleaning Clearance Certification – Facility ID WI042, Logan Avenue, 88th RSC  
USARC Nationwide Indoor Rifle Range Cleanup Project  
Contract No. DACA 27-99-D-0021, Delivery Order No. 14

Dear Mr. Hoyt:

With this letter, IT Corporation certifies that the recent range cleaning activities at Building 405 have successfully attained the project clearance objectives and the range is approved for your reoccupancy. Range clearance procedures consisted of the following:

- A surface-by-surface visual examination to verify that:
  - The lead hazard control work was completed as required
  - No known or suspected lead-dust surfaces are still present in the range at levels that exceed the project clearance level of 200 µg/sf.
- Clearance sampling consisting of collecting wipe samples from the floor surfaces and analyzing the samples for lead.

A formal project report for the range cleanup will be submitted upon completion of all waste disposal activities and receipt of disposal certificates.

Please note that although the range has been cleaned to below the project clearance levels, small amounts of lead dust may be present in the range. Any remodeling activities that may cause a release of dust on wall and floor surfaces should be undertaken in consideration of the Occupational Safety and Health Administration (OSHA) Construction Industry Standard for Lead (29 CFR 1926.62). This OSHA standard should be reviewed before any remodeling activities are conducted. The OSHA standard requires certain controls to reduce or maintain worker exposures less than the Permissible Exposure Limit (PEL) of 50 µg of lead per cubic meter (m<sup>3</sup>). The employer must protect the worker from lead.

Mr. Pete Hoyt

2

6/24/02

We appreciated your cooperation and support during the range cleanup. Should you have any questions, please contact the undersigned at (513) 782-4700.

Sincerely,

IT CORPORATION



William H. Scoville, P.E.

Project Manager

cc: David Dierken, U.S. Army Corps of Engineers, Louisville District  
Kurt Zacharias, 88<sup>th</sup> RSC Environmental Engineer  
Steven Angerthal, 88<sup>th</sup> RSC Environmental Engineer  
Kevin Devenport, 88<sup>th</sup> RSC State Environmental Manager – WI